

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A microwave frequency converter comprising:
an RF amplifier whose gain is adjustable to any value within a range from an amplified state to an attenuated state, said amplified state being a state where the RF amplifier performs amplification and said attenuated state being a state where the RF amplifier performs attenuation;
and a control circuit that applies a gain control voltage to the RF amplifier;
wherein the control circuit controls the gain control voltage such that the gain of the RF amplifier is in the attenuated state during a period of time including a time during which a transmission section performs oscillation and times therebefore and thereafter, and to be in the amplified state during any period of time other than the period of time; and
further wherein the RF amplifier does not perform attenuation when its gain value is associated with an amplified state.

2. (Previously Presented) The microwave frequency converter according to claim 1, wherein the control circuit continuously changes the gain control voltage to continuously change the gain of the RF amplifier from a predetermined gain value in the amplified state to a predetermined gain value in the attenuated state, or from a predetermined gain value in the attenuated state to a predetermined gain value in the amplified state.

3. (Previously Presented) The microwave frequency converter according to claim 1, wherein the control circuit instantaneously changes the gain control voltage to instantaneously change the gain of the RF amplifier from a predetermined gain value in the amplified state to a predetermined gain value in the attenuated state, or from a predetermined gain value in the attenuated state to a predetermined gain value in the amplified state.

4. (Previously Presented) The microwave frequency converter according to claim 3, wherein the RF amplifier includes a FET device or a HEMT device operated by applying a negative voltage to a gate thereof and a positive voltage to a drain thereof, and the control circuit simultaneously switches ON/OFF the gate and drain voltages such that the gain of

the RF amplifier is in the attenuated state when the gate voltage and the drain voltage are switched ON, and in the amplified state when the gate voltage and the drain voltage are switched OFF.

5. (Currently Amended) A microwave frequency converter comprising:

an RF amplifier whose gain is adjustable to any value within a range from an amplified state to an attenuated state, said amplified state being a state where the RF amplifier performs amplification and said attenuated state being a state where the RF amplifier performs attenuation;

and a control circuit that applies a gain control voltage to the RF amplifier;

wherein the control circuit controls the gain control voltage such that the gain of the RF amplifier is in the attenuated state during a period of time including a time during which a transmission section performs oscillation and times thereafter and thereafter, and to be in the amplified state during any period of time other than the period of time; and

further wherein ~~both the amplification-amplified state and attenuation-aspects~~attenuated state of the amplifier gain are directly controlled by the gain control voltage.

6. (Previously Presented) The microwave frequency converter according to claim 5, wherein the RF amplifier is a FET.